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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,760

04/30/2008

Masaru Kaida

50478-2500

6642

53044

7590

10/18/2010

SNELL & WILMER L.L.P. (Panasonic)

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EXAMINER

PSITOS, ARISTOTELIS

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

10/18/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/582,760

**Applicant(s)**

KAIDA ET AL.

**Examiner**

ARISTOTELIS PSITOS

**Art Unit**

2627

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date submitted.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The submitted IDS documents have been reviewed and considered as indicated. It is noted that US patent 5319626 was cited on both IDS documents. It is lined through on the second document since it wasn't considered twice. JP 2004-280864 wasn't considered but US 2005/0169132 was considered (its US equivalent?).

### ***Claim Objections***

Applicant is advised that should claims 14 and 15 be found allowable, claims 22 and 23 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

I. Claims 14-rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following analysis of claim 14 renders all of the claims indefinite and/or incomplete since similar language is found in all of the independent claims.

I: Claim 14

Analysis/interpretation

A write-once optical disc onto  
which data is recorded in units of clusters,

optical WO/WORM disc  
desired result/no limitation  
(see A below)

the write-once optical disc inducing a  
temporary defect management area,  
wherein

TDMA

one or more structures  
for updating defect management  
are recorded in the temporary defect  
management area,

one "structure"  
desired result/no limitation  
(see B below)

and each structure performs update separately,

desired result/no limitation  
(see C below)

each of the structures  
includes at least one not-defective cluster  
in which a defective area  
list and structure information are included,

one "structure" includes a  
"one not-defective cluster"  
TDFL & TDDS  
(see D below)

the defective area list includes  
entries for one or more defective  
areas in the optical disc,

"entries" (see E below)

the entries in the defective area list of each structure have been sorted in accordance with information of defective areas,

desired result/no limitation  
(see F below)

the structure information is arranged in a last cluster of each structure,

TDDS "is arranged in a last cluster of each structure"  
(see G below)

and

the structure information includes a plurality of pieces of position information that indicate positions of clusters each of which includes a part of the defective area list.

TDDS includes TDFL pointers

"a part of the defective area list"  
(see H below)

A) That data is recorded in units of clusters doesn't add limitations to the disc structure but rather defines a desired ability in how the information to be written is formatted. This is a desired result adding no limitation to the disc structure itself.

B) The term "structure" is not understood. It isn't clear if this language refers to a data structure. Furthermore, the phrase "are recorded is an intended use/function (updating) and no patentable weight is given. It is assumed by the examiner that the term structure is indeed a "data structure" and it is present in the TDMA. As interpreted, these lines define a TDMA with at least one area, and as presented this TDMA comprise one cluster, (see the conclusion below).

C) Desired result and hence no patentable weight is given, the structure is ignorant on what it does.

D) The informational area found in the TDMA MUST HAVE A NON-DEFECTIVE CLUSTER. It is not seen how this can always be present since there is no guarantee that a non-defective cluster exists. Furthermore, if there is a non-defective cluster, how can there be a defective area list (TDFL) and a TDDS present since no defects are present?

E) Information indicative of one defective area is present. However, there is no guarantee that any defects exist. This language implies that there MUST BE A DEFECT and if none exist these lines are not definitive (see broadest reasonable interpretation in the conclusion below)

F) These lines define a "sorting" result which is desired. However, since the claim is drawn to a physical item (a disc), this "sorting" is not limiting, i.e., the information found in the defective area list (TDFL) is ignorant on any "sorting" ability.

G) A desired result, because the TDMA at best comprises one cluster hence the last is the only cluster present.

H) These lines are not clear. Since one cluster is present in the TDMA, without any defects, how can a plurality of pointers indicative of positions of a plurality of clusters be present? Furthermore, what/how is "a part" defined? This term is not clear and the examiner cannot readily find support for defining such in the remainder of the specification.

II: With respect to claim 16; focusing onto the penultimate paragraph these lines recite a desire functional ability --- when the structure is updated ---; however this is not a positive recitation merely a desired one especially since there are no elements carrying out such an update.

Further clarification to all of the above points is respectfully requested.

In order to interpret the claims so as to contain as much of the claimed limitations as presented in the claims (broadest reasonable interpretation), the examiner concludes that there must be a TDMA, having three subcomponent (segments/areas/regions) of which at least two of these are defective. This however can be an erroneous interpretation.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 14-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a WO having an area which comprises of a TDMA. This TDMA has three (3) subcomponent areas with one (1) non defective cluster and two (2) defective subcomponents, does not reasonably provide enablement for a TDMA with one (1) subcomponent (area/segment/region) having no defective subcomponent present, i.e., a single non-defective subcomponent, or a single subcomponent having position information to a defective subcomponent. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with the claims as presented.

In keeping with the examiner's broadest reasonable interpretation of the claims (see above conclusion with respect to the 35 USC 112 paragraph two rejection); present is a WO optical disc having, a TDMA which has at least 3 (three) subcomponent (segments, areas, sections) of which one (1) is non-defective and two (2) are defective, however, because the claims are not so limited the examiner presents the above 112 first paragraph. rejection.

As interpreted by the examiner the following art rejections are made.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 14-23 are rejected under 35 USC 102(e) as being anticipated by Park et al (7630283).

Park et al discloses a WO optical disc, reading/writing apparatus and method thereof.

As disclosed the Park et al document presents a disc having a TDMA. The TDMA includes a TDFL, and a TDDS, further reference is made to column 5 starting at line 17 as well as figure 6 and the disclosure thereof.

The TDFL has entries contained within the TDFL, entries which include position information of the defective area. Further attention is drawn to figure 7 and the disclosure thereof starting at col. 6 line 38.

As stated therein, when two defective entries exist, the TDFL #n-1 entries exist.

Furthermore, at least one cluster is non-defective and there are two defective clusters, see the description of clusters #1, 2, and 4.

With respect to the recording/reproducing apparatus and methods, see figures 1 and 3 for instance wherein a generating unit and a writing unit and the defect verifying unit are present,



see the description in col. 7 lines 36-45 for instance. Since the structure of claim 1 as interpreted is present no further analysis is made with respect to the claimed limitations.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Park et al (349) which also discloses the same limitations as identified above with respect to the TDMA, TDFL, TDDS and position information and can be relied upon to reject claims 14-16, 18-19, 21-23, i.e., it lacks the verifying unit.

Lee et al, (7397743) also has all the above sections in the TDMA as well as a verifying unit - see col. 15 lines 45-55 for instance and can be relied upon to reject all the claims as well.

The remaining references cited in the accompanying 892 are illustrative of the TDMA < TDFL, TDDS and updating capabilities in this environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARISTOTELIS PSITOS whose telephone number is (571)272-7594. The examiner can normally be reached on part time - Tuesdays & Mondays, 9-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ARISTOTELIS PSITOS/  
Primary Examiner, Art Unit 2627